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THE BEAN BAG

**A newsletter to promote communication among research scientists
concerned with the systematics of the Leguminosae/Fabaceae**

Number 33

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From the Editors

Charles R. Gunn and Joseph H. Kirkbride, Jr.

The BB is designed to promote communication among research scientists concerned with legume systematics. To achieve this goal the BB is issued in May and November of each year and features six columns: From the Editors, News (meetings, major events, announcements, etc.), Latin American Legume Report, Nodulation and Nitrogen Fixation (new nodulation records), Gleanings, and Recent Legume Literature. Data in the Gleanings column are derived from questionnaire sheets which Readers complete and return. If you have news about legume systematics, send it to us for this column. The Recent Legume Literature column contains published research papers of specific interest to BB Readers. Recent is defined as one year old. We rarely will publish a citation that is more than one year old. Specific interest to BB Readers is defined as research papers of interest to a world wide group of legume systematic botanists. We encourage Bean Bag (BB) Readers to send us notices, observations, etc.

Diacritical marks can now be placed in the BB. If such marks should be placed in your name, address, publications, etc., please let us know. We are especially interested in correcting our Directory. Thank you.

An electronic copy of *The Bean Bag* can be obtained from TAXACOM, a free online service for biosystematics and biogeography at the Buffalo Museum of Science, Buffalo, New York, USA. The system operator is Dr. Richard H. Zander. TAXACOM is available 24 hours daily at telephone number 716-896-7581 using 2400/1200/300 bps, 8 data bits, 1 bit stop, and no parity. Outside of the USA use CCITT at 2400 bps, otherwise use Bell protocols.

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THIRD INTERNATIONAL LEGUME CONFERENCE

to be held at the

Royal Botanic Gardens, Kew, England

on

12-17 July 1992

EVOLUTION OF THE LEGUMINOSAE

For information write to Dr. R.M. Polhill, Convenor, Herbarium, Royal Botanic Gardens, Kew, Richmond, Surrey TW9 3AE England. Fax: 081 948 1197 or Telephone: 081 940 1171.

Please see last loose page of this BB for a registration form. Please send this form directly to Polhill.

Program development and registrations are on schedule.

Additions to program: Professor P.G. Waterman has agreed to contribute to the phytochemistry session. Dr. N. Prakesh is being asked to give a paper on embryology.

Subsidiary meetings: Dr. Frank Bisby is arranging for an ILDIS workshop on Tuesday July 7 to Thursday July 9 at the University of Southampton.

Jacques Vassal is arranging an IGMS (mimosoid group) meeting at Kew/Digby Stuart College on Monday July 20 to Tuesday July 21.

Correction to Circular 5, item 3: the First European Conference of Grain Legumes (June 1-3, 1992) will be held in Angers, France, not in Norwich, UK. For more information write to Secretariat, UNIP, 12 avenue George V, 75008 Paris, France.

The Second International Food Legume Research Conference will be held in Cairo, April 12-16, 1992. For more information write to IFLRC-II, Crop Development Centre, University of Saskatchewan, Saskatoon, Saskatchewan S7N 0W0 Canada.

Gleanings

AINOUCHÉ is studying genetic diversity and needs seeds of *Lathyrus angustifolia* var. *reticulatus* and var. *brachystachys* (small seeded forms) from Portugal, Spain, Morocco, Italy, etc.

ALBUQUERQUE is working with medicinal plants of Brazil and studying germination of native legumes: *Copaifera*, *Derris*, *Dipterix*, and *Hymenaea*.

BAUDOIN needs seeds of *Phaseolus coccineus*, *P. lunatus*, and *P. polyanthus*.

BERNHARDT is studying the competition for pollinating bees between *Hibbertia* spp. (Dilleniaceae) and co-blooming legumes.

BISBY with Munyenjembe and Rushforth needs seeds and/or tubers of *Dolichos* for a taxonomic revision and economic assessment. Offers seeds of wild *Vicia* and *Lathyrus* from Vicieae Germplasm Collection.

BRENNER needs advice on controlled pollination of *Coronilla* and *Dalea* and offers seeds from the National Germplasm System.

CHUNG is studying petal morphology of the *Sophora* group, needs flowers of *Neoharmsia* species from Madagascar, and offers legume plants from Korea.

CORBY needs 5 or more seeds of aerial chasmogamous flowers and subterranean cleistogamous flowers of *Amphicarpa bracteata*.

COWAN is working on *Acacia: Juliflora*e.

DEVINE is mapping *Glycine max* genome.

FAGG is working on the genetic variation of *Acacia nilotica*, *A. senegal*, *A. tortilis*, and *Faidherbia albida*. Needs well documented seeds of any African *Acacia* spp. Offers seeds of the above.

FERGUSON is re-evaluating pollen of tribe Sophoreae and continues study of pollen of tribe Loteae with M.J. Diez (Sevilla).

GIGA is working with *Phaseolus* bruchid ecology, biology, and control. Needs *Phaseolus* and *Vigna* bruchids.

GILL is germinating seeds and evaluating seedlings of *Bauhinia* and *Calliandra protoricensis*. Needs tropical wood samples.

GREGORY needs copies of publications with articles on the velvetbean caterpillar, *Anticarsia gemmatalis*, and its host plants in Central America, South America, and Caribbean Archipelagos. Offers copies of publications deposited in library of Louisiana State University Library.

GRUM is conducting interspecific hybridization and field trials on *Pachyrhizus*, needs seeds of all species (especially Central and South American land races), and offers seeds from 150 accessions from Central and South America and Asia.

GUNN is distributing with this BB a copy of USDA Technical Bulletin 1715: Fruits and Seeds of Genera in the Subfamily Caesalpinoideae (Fabaceae). This the second in a tripartite series of Technical Bulletins on legume seed-fruit morphology. The first one was T.B. 1681 covers subfamily Mimosoideae. GUNN and RITCHIE (with illustrations by Karen Parker and Jim Plaskowitz) are databanking DELTA with seed and fruit morphological characters for genera in subfamily Faboideae. We expect to have the plates and databanking completed during 1993.

HANG (new Reader) is studying *Indigofera* spp. from Yunnan Province, P.R.C.

JINSHUANG has a paper on *Sphaerophysa* from China in press, is working on the floristic character of Papilionaceae from China, needs Trifolieae from Northern Hemisphere, and offers same from Northern China.

KANG in collaboration with Dr. Primack is studying seed size variation among legume species: the effects of phylogeny, and in collaboration with BAWA the outcome of sexual selection.

KIRKBRIDE needs viable seeds of taxa in the tribes Loteae and Coronilleae.

KLITGAARD has two papers in press on *Brownea* and *Browneopsis*. Is working on *Platymiscium* for Flora Neotropica and for her dissertation. Will be in Ecuador in autumn of 1991. Please note this correction: Klitgaard is not working on *Macrolobium*.

KOPTUR with Carl Weekley is studying gall-forming insects on *Pithecellobium* in south Florida.

KUMAR is interested in genetics of *Pisum sativum* and legume-*Rhizobium* symbiosis. Needs wide

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range of *Pisum* germplasm.

MASLIN with Peter Brain: Immunology studies in Australian *Acacia* spp., and with WEDER: Proteinase inhibitor studies in Australian *Acacia* spp.

MERCADO (new Reader) is working with legume cytology, specializing in Phaseolinae and needs seeds of same.

MISSET is studying phylogeny of *Ulex* by cross immunoelectrophoresis and western blot. Needs seeds of *U. erinaceus* (from Cado Sagres, Portugal) and *U. pariflorus funkii* and *parviflorus* (from Spain and France).

MOSJIDIS has a paper in the Annals of Botany on polyphenols and condensed tannins in *Lespedeza* (s.l.).

MURRAY (new Reader) is working with cytogenetics and interspecific hybridization in *Lathyrus*, needs *Lathyrus*, and offers same.

NYAWUAME is surveying western Nigerian legumes for ethnomedicinal properties, needs seeds of temperate legumes, and offers legume seeds from tropical West Africa.

PANDEY is working on the legumes of Bihar, India, needs seeds of *Lotus* spp. and offers seeds and voucher specimens of Indian legumes.

POKLE (new Reader) is studying *Alysicarpus* and needs plant material and seeds of genus. Offers plant material from India.

RABAA (new Reader) is hybridizing *Vigna* spp., needs *V. unguiculata* seeds from West Africa, and offers Algerian seeds of same.

RICO-ARCE has a paper in press on some genera of the Ingeae, needs herbarium sheets of *Pithecellobium* s.l. and neotropical *Acacia* and *Albizia* (please send sheets to Kew), and offers identifications.

ROSKOV is monographing *Lupinaster* and needs herbarium material of North American *Trifolium* such as *T. andersonii*, *T. attenuatum*, *T. gymnocarpon*, *T. lemmonii*, *T. macrocephalum*, *T. monoense*, *T. nannum*, *T. thompsonii* and offers a Caucasian endemic (*T. polypyllus*) and herbarium specimens of other Caucasian legumes.

SOUTHON is contributing phytochemical data to ILDIS.

STEIN needs seeds of African *Cynometra* spp.

STEINER is studying interploidy pollen competition in *Trifolium ambiguum*.

STIRTON needs fresh seed of any species of *Ateleia* or *Acosmium* (Sophoreae) for seedling studies.

SYTIN (new Reader) has two papers in press on *Astragalus* and notes that "Astragalus (an enormous genus) is remarkable in its biological diversity, which could be explained in terms of N.I. Vavilov's concept of a species system. The speciation cannot be reduced to a statistical microevolution process on a population level. Even local populations could be extremely variable in terms of phenetic characters, cryptic forms of polymorphism, seasonal races, and modifications of life forms resulting

from adaptation to the diverse environment." Offers duplicates from Russia (Caucasus, Ural, Ukraina, and Volga).

THOTHATHRI is conducting SEM studies of seed coat morphology of species in Millettieae and Cajaneae, needs seeds of Asian species of same, and offers recent publications on Indian legumes.

TINDALE is contributing *Acacia* to Flora of Australia and *Glycine* to Flora of New South Wales (volume 2).

TURNER (B.L.) with C.J. Chen is revising *Thermopsis* for North America.

VANDERBORGH needs seeds of wild species of *Phaseolus* and *Vigna*, and offers small quantities of seeds of 150 taxa of Phaseoleae, mainly *Phaseolus* and *Vigna* with passport data if requested.

VAN DER MAESEN needs *Dunbaria* and *Flemingia* and offers duplicates of African collections: cultivars of various crops.

VIJAY KUMAR needs mature seeds of *Alysicarpus*, *Atylosia*, *Millettia*, *Rhynchosia*, *Sesbania*, and *Zornia*. Offers seeds of Indian *Indigofera* spp.

VIRASORO is studying the species biology of Caesalpinioideae: *Cercidium* (2 spp.), *Dalbergia* (1 sp.), *Delonix* (1 sp.), and *Gleditsia* (1 sp.); Mimosoideae: *Acacia* (6 spp.), *Cathormium* (1 sp.), *Piptadenia* (1 sp.), *Prosopis* (4 spp.), and *Prosopidastrum* (1 sp.); and Faboideae: *Arachis* (1 sp.), *Astragalus* (1 sp.), *Canavalia* (1 sp.), *Desmodium* (1 sp.), *Glycine* (1 sp.), *Hedysarum* (1 sp.), *Lathyrus* (1 sp.), *Macroptilium* (2 spp.), *Melilotus* (1 sp.), *Orobus* (1 sp.), *Spartium* (1 sp.), *Trifolium* (1 sp.), and *Vicia* (1 sp.).

WHITE needs a wide diversity of legume crops and fast-growing leguminous trees (for fuel, wood, forage, and soil improvement) and their wild relatives. Offers a wide range of many species (mostly crops and their wild relatives) in diverse families. *Eds. note:* This is a excellent offer.

WOJCIECHOWSKA has a paper on *Pisum* morphology and anatomy in the Proceedings of International Symposium (Leningrad).

WOLKO is studying both the taxonomy and genetics of *Lupinus* based on isozyme polymorphism, needs seeds of South American lupines, and offers database on *Pisum* (2500 accessions) and Old World *Lupinus* (1000 accessions) including germplasm.

ZHANG (new Reader) is preparing a cladistic analysis of *Bauhinia* and other legumes. Also studying *Cylindrokelupha* and *Pueraria*. Needs *Bauhinia* and American *Cercis* and offers Chinese *Bauhinia*.

RECENT LEGUME LITERATURE

Eds. Note: Author names in all capital letters are BB Readers. Their full names and addresses are listed in the November 1989 BB Directory. Correspondence about their articles should be sent directly to them.

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